



Public Health Preparedness and Situational Awareness Report: #2023:11

Reporting for the week ending 03/18/23 (MMWR Week #11)

March 24, 2023

The weekly Public Health Preparedness and Situational Awareness (PHPSA) Report provides a snapshot of disease throughout Maryland. This report looks for different types of illnesses or disease clusters which may warn of a larger public health issue, including the potential for a bioterrorism event.

Data is gathered from Maryland's Emergency Departments using the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE). Additional data is compiled from the Centers for Disease Control and Prevention's (CDC's) Health Alert Network, the Maryland Department of Health Prevention and Health Promotion Administration, the Maryland Institute for Emergency Medical Services Systems (MIEMSS), the World Health Organization, the National Electronic Disease Surveillance System, and the Program for Monitoring Emerging Diseases (ProMED).

CURRENT HOMELAND SECURITY THREAT LEVELS

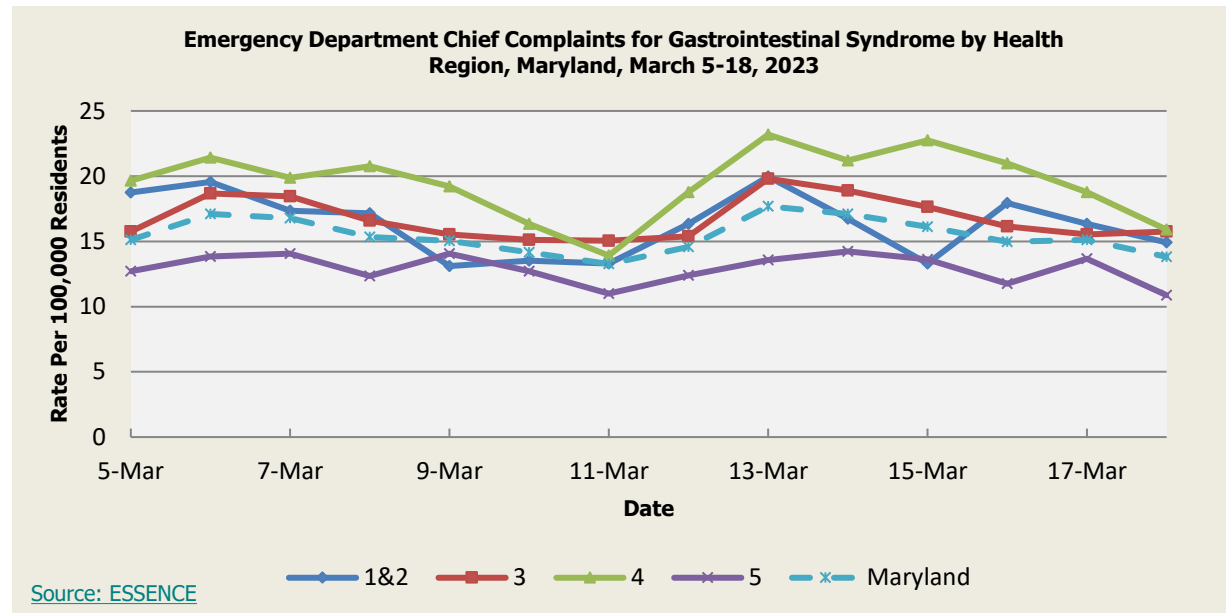
National:	No Active Alerts
Maryland:	Normal (MDEM status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes (excluding the “Other” category; see Appendix 1) by Health and Medical Regions (See Appendix 2). Emergency Department chief complaint data is presented as rates per 100,000 residents using data from the 2010 census. Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE). Baltimore, MD: Maryland Department of Health; 2021.

Gastrointestinal Syndrome

There were six (6) Gastrointestinal Syndrome outbreaks reported this week: three (3) outbreak of Gastroenteritis in Nursing Homes (NCR, Baltimore Metropolitan Area, Western), one (1) outbreak of Gastroenteritis in an Assisted Living Facility (NCR), two (2) outbreaks of Gastroenteritis in Daycare Facilities (Baltimore Metropolitan Area and NCR).

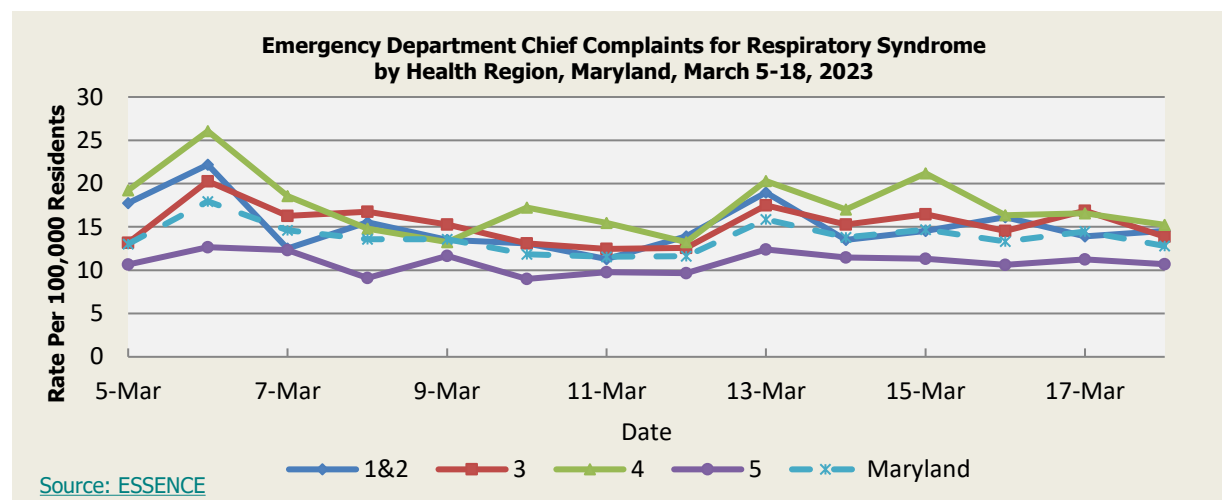


Gastrointestinal Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	11.13	12.49	13.39	8.53	10.92
Median Rate*	13.11	14.61	15.46	10.00	12.85

* Per 100,000 Residents

Respiratory Syndrome

There were thirty-one (31) Respiratory Syndrome outbreaks reported this week: Seven (7) outbreaks of COVID-19 in Assisted Living Facilities (Baltimore Metropolitan Area, NCR and Western), two (2) outbreak of COVID-19 in Correctional Facilities (Baltimore Metropolitan Area and Western), One (1) outbreak of COVID-19 in a Daycare Facility (Baltimore Metropolitan Area), one (1) outbreak of COVID-19 in a Group Home (Baltimore Metropolitan Area), two (2) outbreaks of COVID-19 in Hospitals (Baltimore Metropolitan Area), eight (8) outbreaks of COVID-19 in Nursing Homes (Baltimore Metropolitan Area, Eastern, NCR, Western), one (1) outbreak of COVID-19 in a School (NCR), one (1) outbreak of COVID-19 in a Substance Use Treatment Facility (Eastern), one (1) outbreak of Pneumonia in a Nursing Home (BMA).

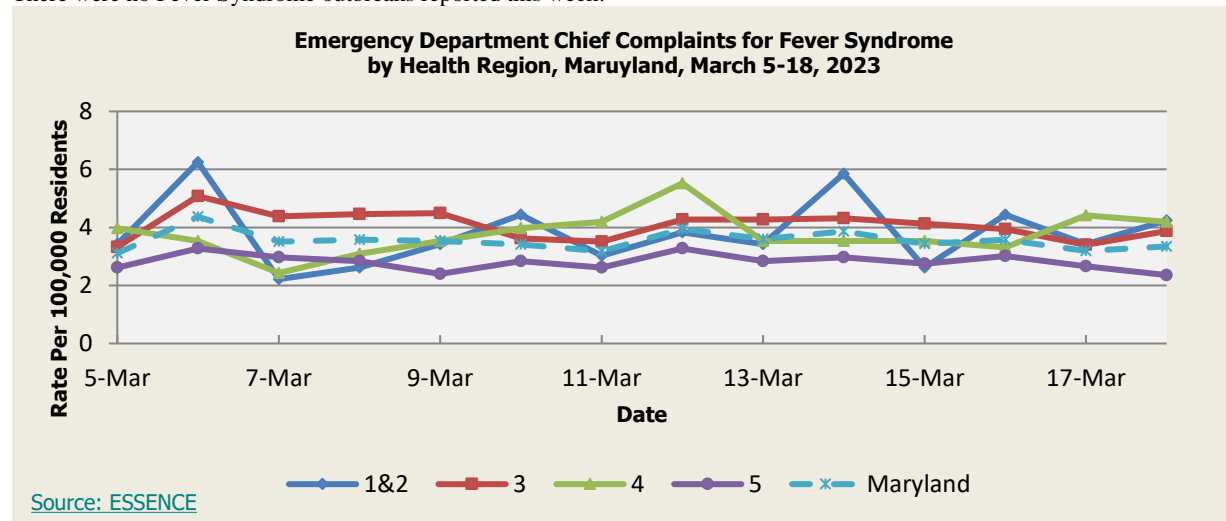


Respiratory Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	10.54	12.44	12.88	8.41	10.77
Median Rate*	12.10	14.03	14.35	9.52	12.16

* Per 100,000 Residents

Fever Syndrome

There were no Fever Syndrome outbreaks reported this week.

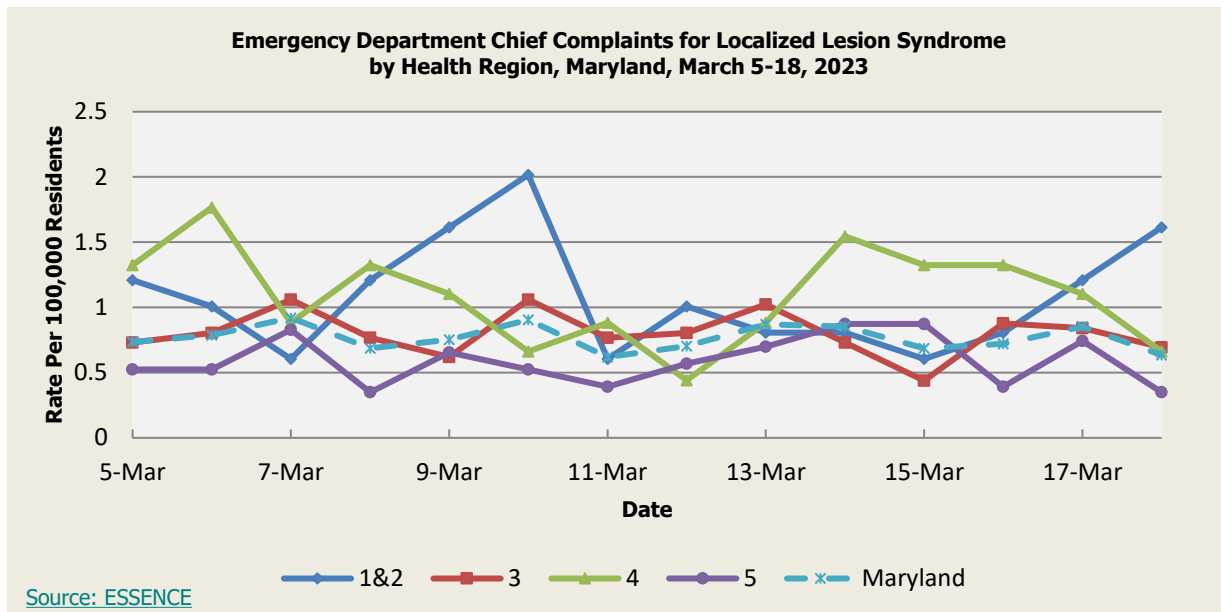


Fever Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.57	3.28	3.48	2.55	2.96
Median Rate*	2.82	3.73	3.97	2.88	3.36

**Per 100,000 Residents*

Localized Lesion Syndrome

There were no Localized Lesion Syndrome outbreaks reported this week.

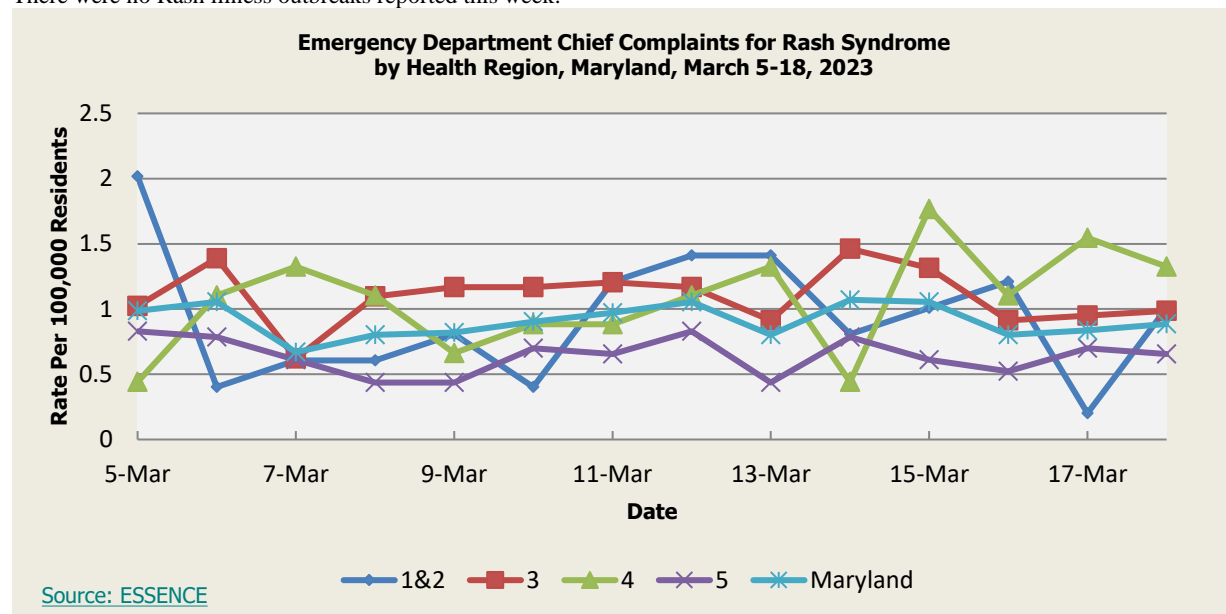


Localized Lesion Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.98	1.42	1.66	0.73	1.14
Median Rate*	1.01	1.64	1.99	0.83	1.31

* Per 100,000 Residents

Rash Syndrome

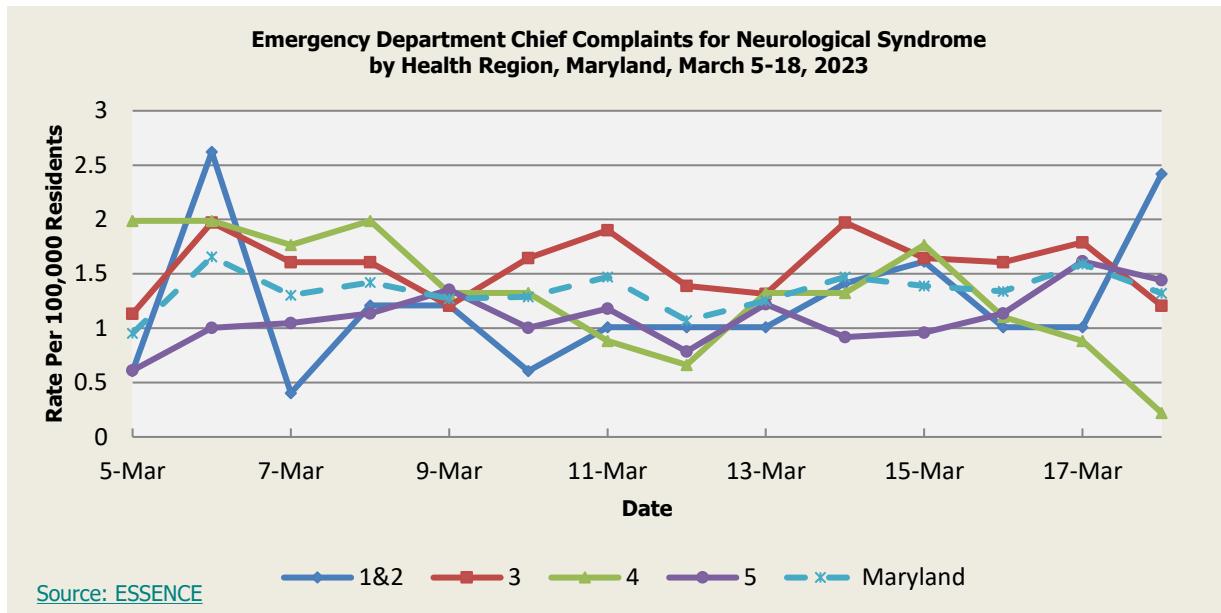
There were no Rash illness outbreaks reported this week.



Rash Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	1.00	1.33	1.41	0.77	1.09
Median Rate*	1.21	1.53	1.55	0.87	1.27

* Per 100,000 Residents

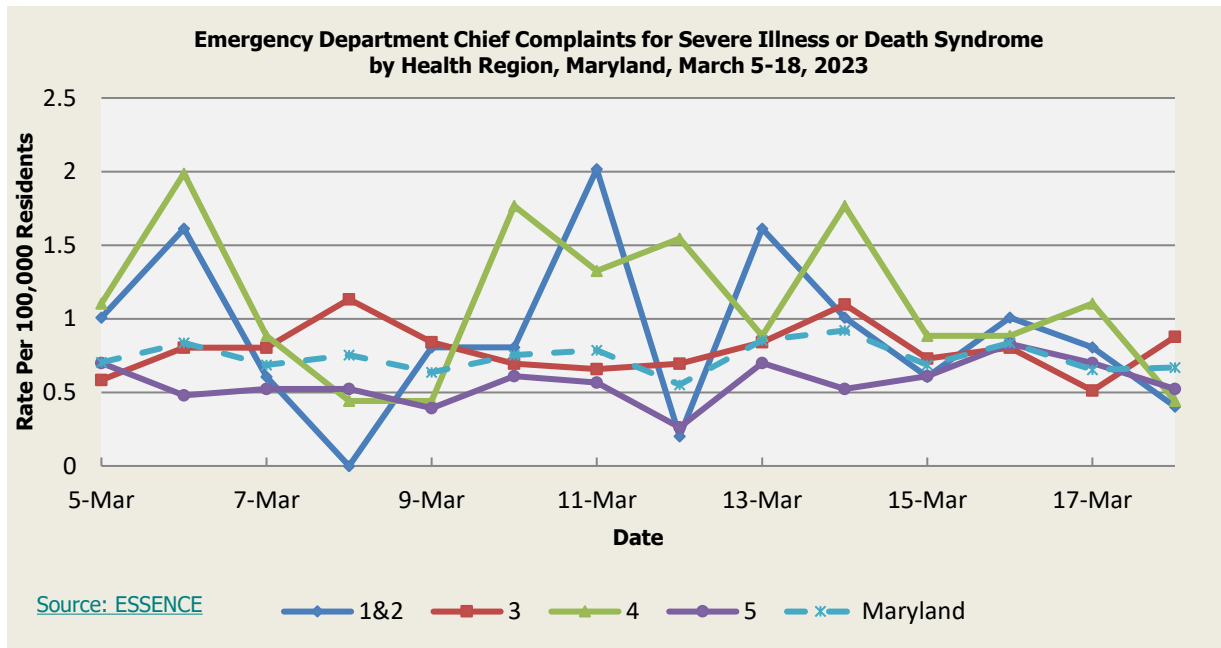
Neurological Syndrome



Neurological Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.70	0.86	0.80	0.55	0.73
Median Rate*	0.81	0.99	0.88	0.61	0.84

* Per 100,000 Residents

Severe Illness or Death Syndrome

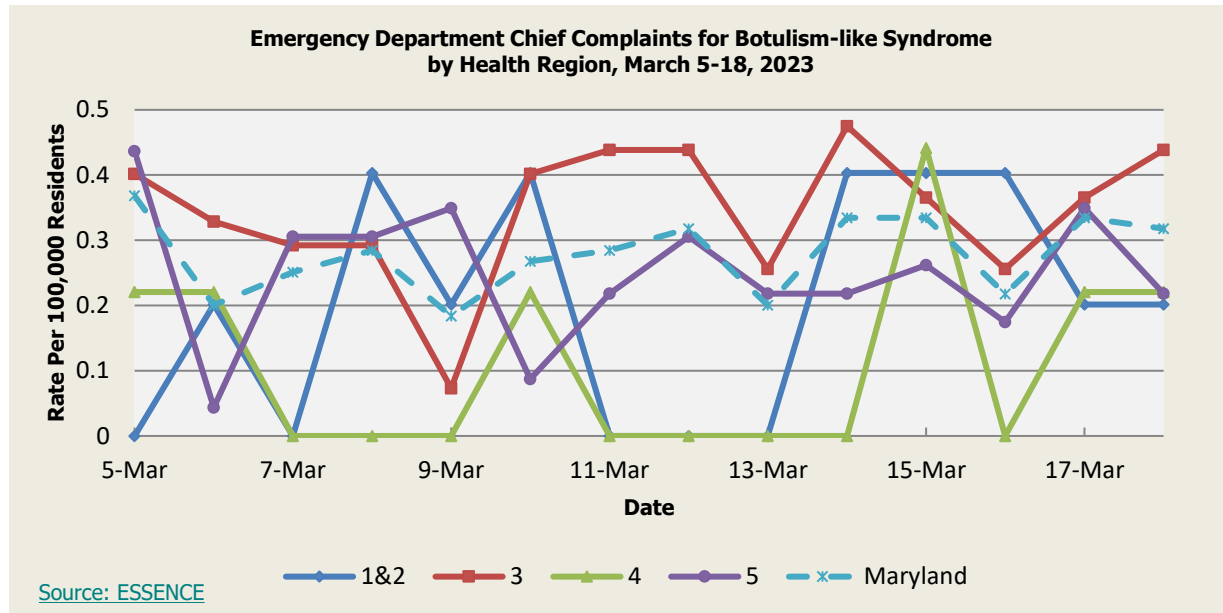


Severe Illness or Death Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.55	0.74	0.72	0.46	0.62
Median Rate*	0.60	0.84	0.88	0.52	0.70

* Per 100,000 Residents

SYNDROMES RELATED TO CATEGORY A AGENTS

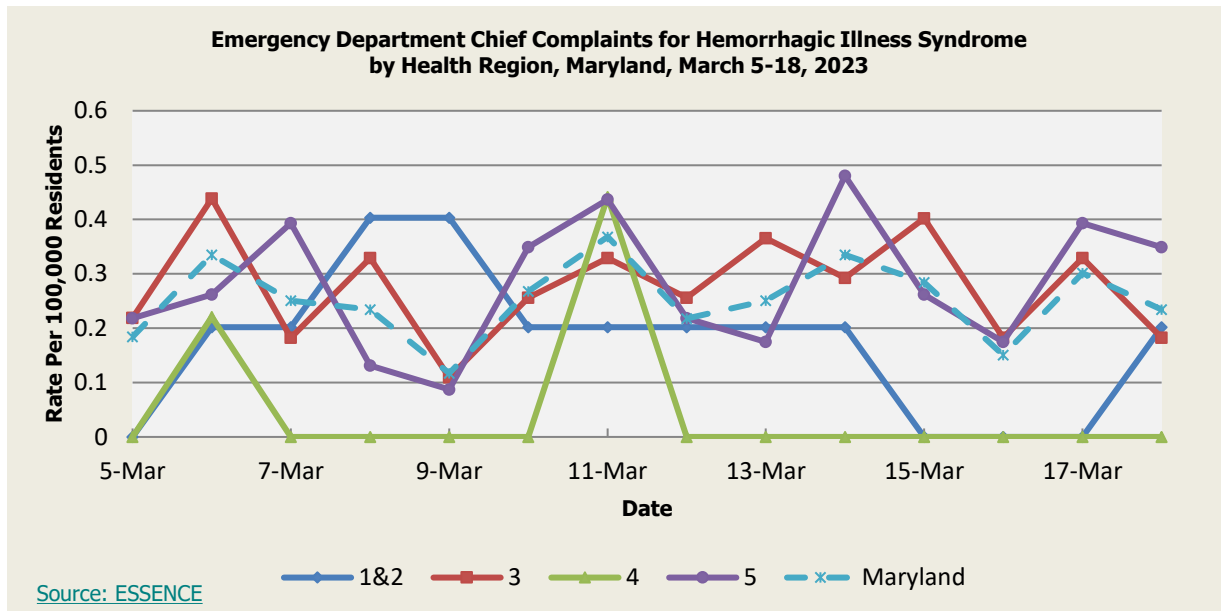
Botulism-like Syndrome



Botulism-like Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.07	0.11	0.06	0.08	0.09
Median Rate*	0.00	0.11	0.00	0.09	0.10

* Per 100,000 Residents

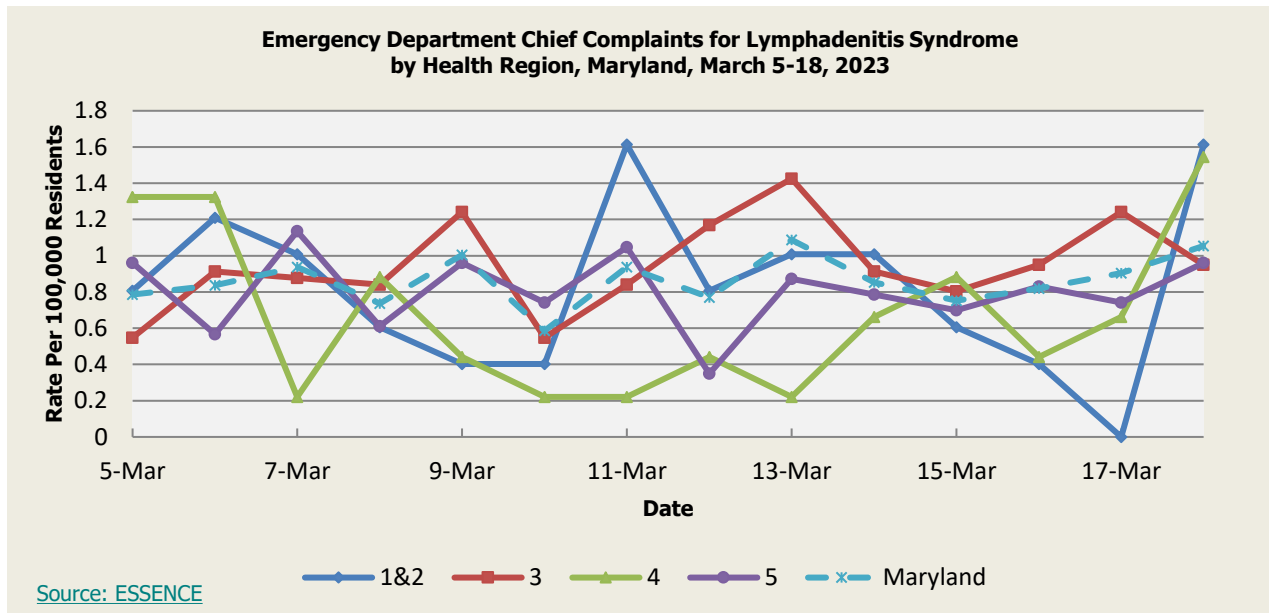
Hemorrhagic Illness Syndrome



Hemorrhagic Illness Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.04	0.14	0.03	0.13	0.12
Median Rate*	0.00	0.11	0.00	0.09	0.12

* Per 100,000 Residents

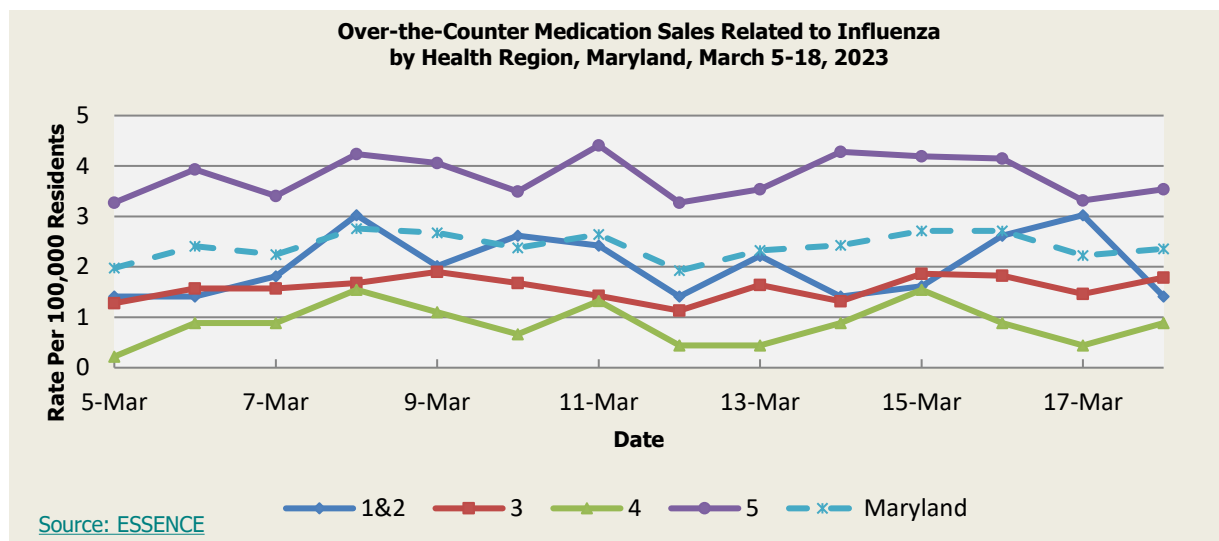
Lymphadenitis Syndrome



Lymphadenitis Syndrome Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	0.34	0.51	0.34	0.34	0.42
Median Rate*	0.40	0.55	0.44	0.35	0.47

* Per 100,000 Residents

Over-the-Counter Influenza-Related Medication Sales

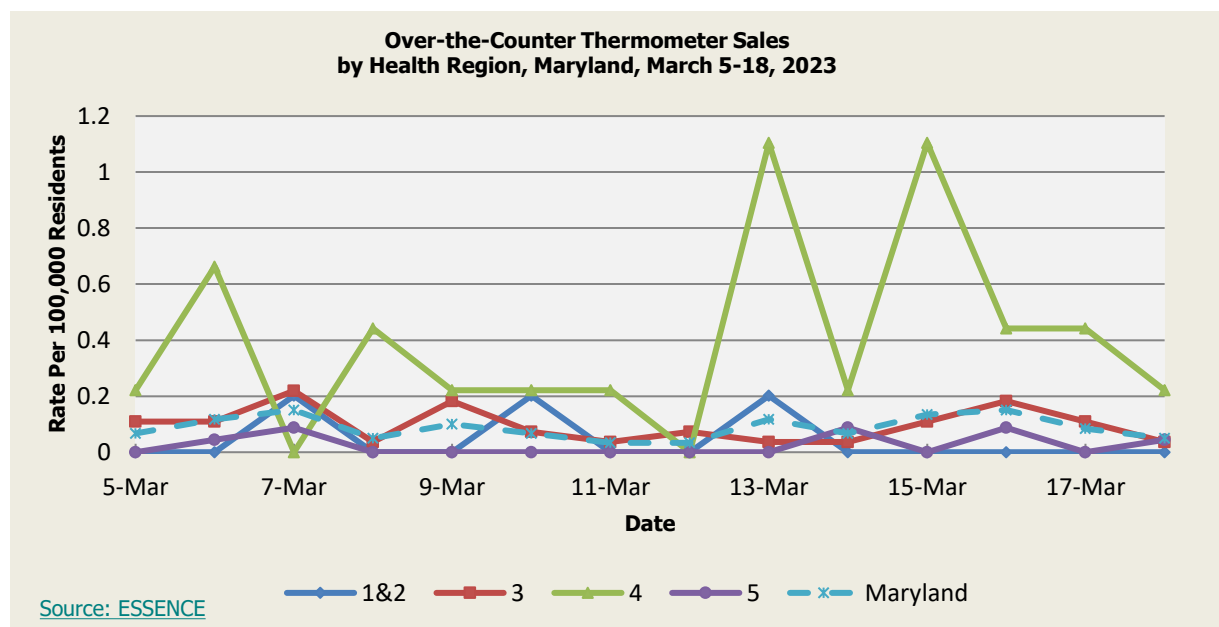


OTC Medication Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.72	3.46	2.12	6.26	4.37
Median Rate*	2.42	3.11	2.21	6.46	4.32

* Per 100,000 Residents

Over-the-Counter Thermometer Sales

There was no appreciable increase above baseline in the rate of OTC Thermometer Sales during this reporting period.



Thermometer Sales Baseline Data January 1, 2010 - Present					
Health Region	1&2	3	4	5	Maryland
Mean Rate*	2.26	2.14	1.75	2.83	2.39
Median Rate*	2.42	2.48	1.99	3.36	2.84

* Per 100,000 Residents

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. Presently, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national, and global levels are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of March 24, 2023, the WHO-confirmed global total (2003-2023) of human cases of H5N1 avian influenza virus infection stands at 862, of which 455 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 53%.

AVIAN INFLUENZA

AVIAN INFLUENZA: EUROPE, 22 March 2023, The event started on 14 Mar 2023 and was confirmed on 16 Mar 2023. A total of one outbreak has been reported to date [22 Mar 2023]. HPAI H5N1 was confirmed in a laying hens farm in Kaisersesch, Cochem-Zell, Rheinland-Pfalz. Read More: <https://promedmail.org/promed-post/?id=8709109>

HUMAN AVIAN INFLUENZA

There were no relevant human avian influenza reports this week.

NATIONAL DISEASE REPORTS

INVASIVE MOSQUITO - USA: (FLORIDA), 24 March 2023, Another new mosquito species has made its way across the tropics into Florida, making a permanent home in at least 3 counties. Read More: <https://promedmail.org/promed-post/?id=8709146>

CANDIDA AURIS - USA: 23 March 2023, Cases of a potentially deadly and increasingly treatment-resistant fungus called _Candida auris_ have skyrocketed 200% since 2019, prompting the CDC to issue a warning to healthcare facilities about the rising threat. Read More: <https://promedmail.org/promed-post/?id=8709116>

LEGIONELLOSIS – USA: (NEW HAMPSHIRE), 22 March 2023, New Hampshire State health officials issued a warning Tuesday [21 Mar 2023] about a legionnaire's disease outbreak associated with a New Hampshire campground. Read More: <https://promedmail.org/promed-post/?id=8709096>

BLASTOMYCOSIS - USA: (MICHIGAN), 22 March 2023, Public Health of Delta & Menominee Counties [PHDM] has confirmed an outbreak of blastomycosis that appears to be connected to an Escanaba paper mill. Read More: <https://promedmail.org/promed-post/?id=8709092>

INTERNATIONAL DISEASE REPORTS

LISTERIOSIS – EUROPE (UK), 25 March 2023, One person in the UK has died in a _Listeria_ outbreak, public health bodies have revealed, as they warned consumers not to eat Baronet semi-soft cheeses because of contamination discovered at exceptionally high levels in some products. Read More: <https://promedmail.org/promed-post/?id=8709156>

RIFT VALLEY FEVER – UGANDA, 24 March 2023, The [Uganda] government is reluctant to impose a livestock quarantine in Mbarara despite registering 5 confirmed cases of death among humans resulting from Rift Valley Fever [RVF]. Read More: <https://promedmail.org/promed-post/?id=8709149>

UNDIAGNOSED RESPIRATORY ILLNESS - DEMOCRATIC REPUBLIC OF CONGO, 23 March 2023, On 21 Mar 2023, the ACP (Congolesse Press Agency) learned from local sources that 13 children aged zero to 2 years died following a disease of as yet unknown origin in the rural area of Yakusu, in Yasekwe village in the Yawenda groupement. Read More: <https://promedmail.org/promed-post/?id=8709110>

ANTHRAX – RUSSIA, 22 March 2023, The Department of Rospotrebnadzor for the Moscow Region reports a case of suspected anthrax in a citizen who arrived in the region from the Republic of Chuvashia. Read More: <https://promedmail.org/promed-post/?id=8709103>

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.health.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

More data and information on influenza can be found on the MDH website: <http://phpa.health.maryland.gov/influenza/fluwatch/Pages/Home.aspx>

Please participate in the Maryland Resident Influenza Tracking System (MRITS): <http://flusurvey.health.maryland.gov>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

Prepared By:

Office of Preparedness and Response, Maryland Department of Health
7462 Candlewood Rd, Hanover, MD 21076

Peter Fotang, MD, MPH
Epidemiologist, Biosurveillance Program
Office: 443-628-6555
Email: Peter.Fotang@maryland.gov

Kurt Seetoo, MPH
Biosurveillance / Data Integration Manager
Office: 443-628-6574
Email: Kurt.Seetoo@maryland.gov

Appendix 1: ESSENCE Syndrome Definitions and Associated Category A Conditions

Syndrome	ESSENCE Definition	Category A Conditions
Botulism-like	(Botulism or (DifficultyFocusing and DifficultySpeaking) or (DifficultySpeaking and DifficultySwallowing) or (DifficultySwallowing and DifficultyFocusing) or DoubleVision or FacialParalysis or GuillainBarre or Ptosis) and not GeneralExclusions	Botulism
Fever	(Chills or (FeverPlus and (Drowsiness or Seizure)) or FeverOnly or SepsisGroup or ViralSyndrome) and not GeneralExclusions	N/A
Gastrointestinal	(AbdominalCramps or AbdominalPainGroup or Diarrhea or FoodPoisoning or Gastroenteritis or GIBleeding or Peritonitis or Vomiting) and not (GeneralExclusions or Gynecological or Obstetric or Reproductive or UrinaryTract)	Anthrax (gastrointestinal)
Hemorrhagic Illness	(FeverOrChills and (AcuteBloodAbnormalitiesGroup or BleedingFromMouth or BleedingGums or GIBleeding or Hematemesis or Hemoptysis or Nosebleed or Petechiae or Purpura)) and not GeneralExclusions	Viral Hemorrhagic Fever
Localized Lesion	(Boils or Bump or Carbuncle or DepressedUlcer or Eschar or Furuncle or InsectBite or SkinAbscess or (SkinSores and not AllOverBody) or SkinUlcer or SpiderBite) and not (GeneralExclusions or Decubitus or Diabetes or StasisUlcer)	Anthrax (cutaneous) Tularemia
Lymphadenitis	(BloodPoisoning or Bubo or CatScratchDisease or SwollenGlands) and not GeneralExclusions	Plague (bubonic)
Neurological	(([Age<75] and AlteredMentalStatus) or (FeverPlus and (Confusion or Drowsiness or Petechiae or StiffNeck)) or Delirium or Encephalitis or Meningitis or UnconsciousGroup) and not GeneralExclusions	N/A
Rash	(ChickenPox or Measles or RashGeneral or Roseola or (Rubella and not Pregnancy) or Shingles or (SkinSores and AllOverBody) or Smallpox) and not GeneralExclusions	Smallpox
Respiratory	(Anthrax or Bronchitis or (ChestPain and [Age<50]) or Cough or Croup or DifficultyBreathing or Hemothorax or Hypoxia or Influenza or Legionnaires or LowerRespiratoryInfection or Pleurisy or Pneumonia or RespiratoryDistress or RespiratoryFailure or RespiratorySyncytialVirus or RibPain or ShortnessOfBreath or Wheezing) and not (GeneralExclusions or Cardiac or (ChestPain and Musculoskeletal) or Hyperventilation or Pneumothorax)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Severe Illness or Death	CardiacArrest or CodeGroup or DeathGroup or (Hypotension and FeverPlus) or RespiratoryArrest or SepsisGroup or Shock	N/A

Appendix 2: Maryland Health and Medical Region Definitions

Health and Medical Region	Counties Reporting to ESSENCE
Regions 1 & 2	Allegany County Frederick County Garrett County Washington County
Region 3	Anne Arundel County Baltimore City Baltimore County Carroll County Harford County Howard County
Region 4	Caroline County Cecil County Dorchester County Kent County Queen Anne's County Somerset County Talbot County Wicomico County Worcester County
Region 5	Calvert County Charles County Montgomery County Prince George's County St. Mary's County

